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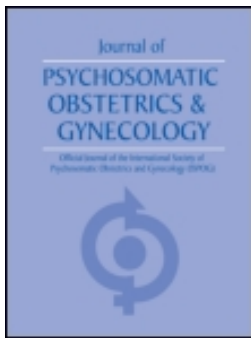
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ORIGINAL ARTICLE

## Client perspectives of midwifery care in the transition from subfertility to parenthood: a qualitative study in the Netherlands

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### Abstract

**Background:** Pregnancy, childbirth and the postpartum period after fertility treatment are considered “normal” in the Netherlands, with no indication of an increased obstetric risk, and can therefore be monitored by a primary care midwife. However, there is little evidence on the experiences of couples and women who finally get pregnant after fertility treatment and a lack of training for midwives exists on this subject. The aim of this study was to map the midwifery care needs of the subfertile client with past fertility problems.

**Methods:** In 2011, we interviewed two couples and seven women who conceived through fertility treatment and received primary midwifery care at some point during their pregnancies. This explorative, qualitative study was based on the interpretivist/constructivist paradigm.

**Results:** Although the participants are not representative of all subfertile clients, the findings of our qualitative study highlight the needs of women and their partners who have become pregnant through fertility treatment including help from the primary care midwife in understanding the likely course of their pregnancy, more psychosocial support and acknowledgement of the fertility treatment history, and more consultations and frequent ultrasound scans than usual to confirm pregnancy.

**Conclusions:** Our study points out that the women who have become pregnant through fertility treatment and their partners communicate seemingly paradoxical prenatal care needs. It can help maternity care providers to optimally meet the care needs of subfertile clients and empower them during their transition from subfertility to parenthood.

### Keywords

Assisted reproductive technologies, coping with the aftermath of infertility, midwifery, pregnancy, qualitative methods

### History

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### Introduction

In high-income countries, the number of women delaying childbearing is rising [1], which appears to be a factor in the growing proportion of subfertile women [2]. Subfertility can be defined as one year of unwanted non-conception with unprotected intercourse in the fertile phase of the menstrual cycles [3]. Various studies have shown that subfertility can be experienced as a traumatic life event, causing a sense of loss, failure, extreme exclusion and other social, economic and psychological consequences [4–6]. Fertility treatment, such as *in vitro* fertilization (IVF) and intracytoplasmic sperm

injection (ICSI), makes new routes to possible parenthood. Similar to many Western societies [7], the percentage of Dutch infants born after fertility treatment has increased, from 1.3% in 1996 to 4.3% in 2013 [3,8]. In the Netherlands, pregnancy after fertility treatment is considered “normal” [9] with no indication of an increased obstetric risk, and can therefore be monitored by the primary care midwife. The Obstetrics Indications List [9] carefully distinguishes between “physiological” and “pathological” pregnancies and births, and women in the first category are reimbursed only for care provided by primary care midwives and GPs. The primary care midwife plays a key role as provider of maternity care in the Netherlands. In 2013, 85.4% of all pregnant women in the Netherlands received care in early pregnancy by a primary care midwife, 50.6% started childbirth and 28.6% of all births ( $n=167\,159$ ) were supervised by a primary care midwives at home or in a homelike setting in a hospital or birth center [8].

Women cared for by primary care midwives in the Netherlands receive an average of 12.4 prenatal consultations,

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including 2.7 ultrasound scans, in the course of their pregnancy [10]: one consultation during the first trimester, at intervals of 4–6 weeks in the second trimester up to 24 weeks, at intervals of 3 weeks thereafter, and more frequently after 32 weeks [11]. After childbirth, the primary care midwife will visit the mother and child four to six times.

Conceiving and giving birth to a desired child is assumed to be a happy time. However, the experience of pregnancy after fertility treatment can be stressful [12,13] and the transition from subfertility to parenthood is often experienced as a complex and emotional time [14–16]. Healthcare professionals should be aware of the needs of these pregnant women and partners [17–20]. At this moment there is a dearth of evidence regarding the experiences of pregnancy for women who successfully achieve pregnancy following fertility treatment and minimal training for midwives and other maternity care providers [17,18], which may result in health professionals being insufficiently aware of the specific needs of subfertile clients during pregnancy, childbirth and early parenthood.

We undertook a qualitative study, using in-depth interviews with a small group of subfertile clients who received care by a primary care midwife at some point during their pregnancy and formulated the following research question: What are the midwifery care needs during pregnancy of couples or women who have conceived as a result of fertility treatment?

## Methods

### Design

This qualitative descriptive study is based on an interpretivist/constructivist paradigm using a constant comparison/grounded theory design [21,22] using semi-structured, in-depth interviews to explore the experiences of subfertile clients who received midwifery care during their pregnancy.

### Participants

Women, and their partners, who were pregnant after a subfertile period were recruited *via* an announcement on an internet forum for people with fertility problems ([www.freya.nl](http://www.freya.nl)) and *via* snowball sampling. Nine interviews with 11 participants were held. Two couples were interviewed at their homes in April 2011 by final year midwifery students (student group A) who had received a five-day training on interviewing and qualitative research. After the decision to continue this study, seven individual interviews were held by phone by the first author (CW) in November 2011. None of the researchers and interviewers was personally or professionally related to the participants.

### Data collection

Each participant was briefed on the purpose of the study and provided informed consent for the use of the information from the interview. A semi-structured interview guide (topic list) was used to help and maintain focus during the interviews (Table 1).

For each topic, specific open-ended conversationally-worded questions were formulated to obtain some uniformity

in how questions were asked in different interviews. The phrasing of questions was identified through popular literature in general (see [http://www.freya.nl/web\\_boeken/boekenwijzer.pdf](http://www.freya.nl/web_boeken/boekenwijzer.pdf)), from brainstorming between the authors and Freya. To check validity and applicability during the interviews, the questions were orally pre-tested for comprehensibility, simplicity and clarity. The interviewers first did trial interviews, and were coached by the last author (PdC – experienced researcher).

The interviews lasted on average for 55 min (range: 28–91 min). Participants were encouraged to speak freely about their experiences before, during and after pregnancy in a single interview. The interviewers stressed their neutrality by exploring both positive and negative remarks of the participants. At the end of each interview the participants were invited to provide feedback on the interview and to verify a short oral summary. Directly after an interview, the interviewers evaluated their findings and formulated areas that called for more in-depth exploration in the next interview, following the successive and cyclical order common in the constant comparison/grounded theory design. Eventually, participants were invited to comment on the transcript and a draft version of this article. No further comments were returned.

### Data analysis

The interviews were recorded on tape and typed out by the interviewers. These transcripts were anonymized, but in order to retain a personal touch the participants were given fictional names. All transcripts were read several times to get a sense of the content as a whole. Data were then categorized into themes by each researcher, using content analysis [22,23]. The interviews were first open coded (labeling), axial coded (categorized) and then selectively coded (thematically). The analyses were performed by CW (psychologist), WA and AP (student midwives), with consensus reached on the findings and with reflections on the research process and the role of the researchers. Transcripts were coded by each researcher independently, and the code trees generated were in agreement with each other. Examples of the analytical coding process are shown in Table 2.

Quotes were translated into English by an accredited translator. To assess the validity of our findings, the results were discussed in a group session of a Dutch midwifery care conference and with several individual midwives and experts by experience.

### Ethical considerations

The study was approved by the science committee of our institute (WC2011-005) and supported by Freya. All participants were assured of anonymity and confidentiality and that they could freely withdraw from the study at any time. All data were anonymized.

## Results

We held nine interviews with 11 participants from different parts of the Netherlands (north, central and south). Table 3 present the participants' characteristics. The average age of

Table 1. Topic list.

- Fertility history (context of desire to conceive, fertility treatment, gravidity, miscarriages, ectopic pregnancies, abortions)
- Gynecological & obstetric history (parity, details of past pregnancies)
- What was your experience during your period of subfertility?
- What type of care did you require from the primary care midwife or other maternity care providers?
- To what extent do you feel that the care you wanted or received differed from standard midwifery care?
- Do you have any suggestions for primary care midwives or other maternity care providers who are caring for clients with a history of subfertility?

Table 2. Examples of coding process.

Citation	Category	Theme
<b>Helen p. 10:</b> <i>“And what I missed was more attention from them, um, I expected them to ask more questions. They did ask some question, they mentioned that I got pregnant thanks to my ICSI treatment. So you can’t say they ignored it, but I had the feeling that they didn’t pay extra attention to my case.”</i>	Need for understanding of treatment history	Need for understanding of impact of previous history
<b>Ivonne p. 11:</b> <i>“But, um, the ultrasound scan, I felt fine for the first 2 or 3 days after it and I was confident that everything was all right, but by the time the next scan was due I was all stressed out and nervous again.”</i>	Need for early and frequent ultrasound scans and monitoring	Need for care in general

the women was 34.1 years (range: 32–38 years) and the average age of the men was 33.5 years (range: 32–35 years). The majority of the women and couples had waited two years or more to get pregnant. The cause of subfertility was attributed to the woman ( $n=2$ ), the man ( $n=4$ ), both partners ( $n=1$ ) or cause unknown ( $n=2$ ). Different fertility treatments were used, like intrauterine insemination (IUI), IVF, ICSI and donor insemination (DI).

Four main themes emerged from the analysis of the transcripts (Table 4). The first is the paradoxical feelings regarding the normality/non-normality of the pregnancy of women who became pregnant after fertility treatment, followed by the need for understanding of the impact of these women’s previous history, psychosocial care needs and care needs in general.

We did not see patterns based on the degree of fertility treatments required or the length of the subfertility or based on the gravity/parity of the participants. Short quotes illustrating the various themes are given. Each quote is identified by the fictional name and the page number of the transcript where it occurs.

### Normal but not normal: paradoxical feelings

Subfertile clients wanted to regard their pregnancy as normal and would like to receive normal midwifery care after successful fertility treatment. Most participants opted for primary midwifery care or were referred to a primary care midwife, and were quite happy with this arrangement. They wanted to leave the clinical setting of the hospital behind themselves. The hospital reminded them of the time when they had fertility problems, and receiving maternity care from a primary care midwife felt like a new start. One participant expressed a different view: she felt that she was a special case, and wanted to be treated accordingly.

While most women indicated that they wanted to be treated like a normal mother-to-be, they simultaneously expressed

care needs that were not in line with this picture; for example, many said that they needed reassurance of the validity of their pregnancy by having more ultrasound scans and more frequent check-ups than usual (Table 5).

### Understanding the impact of previous history

Very little attention was paid during the prenatal consultations to the previous treatment history experienced by the mother-to-be and her partner. This gave them the impression that the midwife had very little understanding and limited knowledge of fertility treatments. Although the previous history of fertility treatment was mentioned during the first visit, the midwife would not pursue this matter actively nor pursue it further during later consultations. The participants had expected that more attention would be paid to their fertility treatment history, and most indicated that they felt a need for this. A few participants did indicate, however, that they felt the care they received was adequate (Table 6).

### Psychosocial support

Participants often indicated being anxious, tense and uncertain about the course of the pregnancy. They found it difficult to initiate discussions about their feelings and needed to be prompted by means of questions such as, ‘How are things with you now, compared with what you’ve been through in the past?’, ‘Are you able to enjoy your pregnancy?’, ‘Can you imagine that you’re really going to have a baby, and can you prepare for its arrival?’ According to the participants, five minutes’ attention concerning their previous history would be sufficient (Table 7).

### Care needs in general

Participants indicated that they had to wait too long for the first consultation, even though they had mentioned that they had conceived as a result of fertility treatment. They

Table 3. Characteristics of interviewees.

Fictional name	Age*	Region of origin	GPA†	Cause of infertility	Type of fertility treatment‡	Duration treatment	Care provider during pregnancy
Anna	33	Groningen	G1P1	Reduced sperm potency	ICSI five attempts in the cycle and three re-placements	2.5 years	Midwife referred to gynecologist at term
Abraham	35				Seven IUI	4.5 years	Midwife
Bertha	31	Groningen	G1P0	Early menopause	Six ICSI in own cycle		
Bjorn	32				Hyperstimulation		
Catharine	37	Utrecht	G2P1	Cause unknown	1st: 4 IUI, 2 IVF, 1 cryo replacement	4 years	Midwife referred at 36 weeks
Didi	34	Overijssel	G2P0A1	Reduced sperm potency	2nd: spontaneous	4 years	Midwife
Erica	32	Zuid-Holland	G2P2	Cause unknown	Four ICSI in Zwolle and one ICSI in Germany		Midwife
Fay	38	Utrecht	G2P2‡	Male infertility	1st: 5 IVF, 7IUI, 2 ICSI	1st: 4 years	Midwife
					2nd: 12 cryos, 1 ICSI	2nd: 1.5 years	Midwife
					1°: TESA	2nd	Midwife
					premature labour at 23 weeks:		referred at 23 weeks
					2nd : finish up Cryo , 2 x ICSI		Gynecologist
					1°: spontaneous IUFD at 24 weeks due to trisomy 18	2nd: 6 months	Midwife
Gwen	36	Utrecht	G3P2‡A1	Elevated FSH, otherwise unknown	2°: spontaneous	3rd: 5 years	referred to gynecologist at 6 months
					3°: 7 IUI, 1 ICSI		
Helen	34	Overijssel	G2P1A1	Sterilization of husband	1st: PESA, 3 ICSI	2.5 years	Midwife
					2nd: 1 ICSI		
Ivonne	32	Noord-Brabant	G2P1A1	PCOS	1e: 6 ICSI, 3 cryo, 1 IMSI, 1 DI (IUFD 10 week)	4.5	Gynecologist
				Male infertility	2e: 1 DI		

\*At the time of interview.

†G = gravidity, P = parity, A = no. of abortions.

‡Cryo = cryopreservation, DI = donor insemination, ICSI = intracytoplasmic sperm injection, IMSI = intracytoplasmic morphologically selected sperm Injection, IUFD = intrauterine fetal death, IUI = intrauterine insemination, IVF = *in vitro* fertilization, PCOS = Polycystic Ovarium Syndrome, PESA = percutaneous epididymal sperm aspiration, TESE = testicular sperm extraction.



considered the intervals between successive consultations to be too long, and would like them to be reduced. All were anxious that the baby would be handicapped or die during pregnancy or childbirth. They said that they lived from check-up to check-up. Ultrasound scans or fetal heartbeat monitoring gave them the reassurance that they said they needed. Some had bought an Angelsounds fetal Doppler system for the home, which gave them the reassurance that their baby was alive whenever they needed it (Table 8).

Practical tips for maternity care providers

When asked the question: “Do you have any suggestions for primary care midwives or other maternity care providers who are caring for clients with a history of subfertility?” the participants gave the following practical tips:

- Pay particular attention to the client’s previous medical history by asking explicitly about this and about the feelings of the partner, and create a relationship of trust.
- Ask about the care wishes of the mother-to-be.
- Offer more frequent consultations.

Table 4. Schematic representation of the results.

Client centered midwifery care
1. Normal but not normal: Paradoxical feelings
a. Coping with change from inability to conceive to being pregnant
b. Wish for normal pregnancy
c. Being different from other pregnant women
d. Feeling obliged to enjoy pregnancy
2. Need for understanding of impact of previous history
a. Need for client-oriented care and customized information
b. Need for understanding of treatment history
c. Need to discuss fertility treatment
3. Need for psychosocial care
a. Need for support in postpartum period
b. Emotional support and guidance
c. More attention to reassurance and uncertainty
d. Create opportunities to discuss feelings
4. Need for care in general
a. Need for early and frequent ultrasound scans and monitoring of fetal heart sounds
b. Need to feel the fetus oneself
c. Need for shorter time between consultations
d. Need for extra information
e. Wish for extra consultations, frequent use of fetal heartbeat monitor

Table 5. Normal, but not normal: paradoxical feelings.

<b>Helen p. 7:</b> “ <i>This pregnancy is normal – or fairly normal, at least. Now I just want a normal pregnancy. I had a problem, but that’s solved now and I want to get out of the hospital – back to a normal routine where I can have my baby under the care of a normal midwife.</i> ”
<b>Bertha p. 6:</b> “ <i>The hospital is simply associated with too many memories of drama, stress and sadness. Being under the care of a midwife is a kind of new start without all that baggage: now you can just have your baby like anyone else.</i> ”
<b>Helen p. 19, 20:</b> “ <i>I didn’t experience this as a normal pregnancy. What it was for me . . . Look, every woman who has a baby in the normal way assumes that she’s going to have at least one more, or doesn’t give the matter much thought. But I know this is the only one for me.</i> ”

Table 6. Understanding the impact of previous history.

<b>Anna p. 15:</b> “ <i>ICSI . . . the topic was never mentioned. She never really asked ‘Gosh, were there any difficult moments or how did the whole thing go?’ I think that was because she knew very little about the whole procedure.</i> ”
<b>Bjorn p. 4:</b> “ <i>It was one of the most intense period for the two of us [. . .] . . . And, uh, you cannot do much, but you can do it together.</i> ”

- Make yourself available: allow the client to have a low threshold for contacting you.
- Be actively involved: discuss the woman’s feelings about her previous history and her impending motherhood on several occasions.
- Allow extra time for this target group.

Discussion

Pregnancy, childbirth and the postnatal period after fertility treatment are considered “normal” and low-risk in the Netherlands, with no indication of an increased obstetric risk, and can therefore be monitored by a primary care midwife. However, there is little research on the experiences of couples and women who finally get pregnant after fertility treatment, and there appears to be a lack of training for midwives and other maternity care providers on this subject. The aim of this study was to explore the midwifery care needs of couples or women who have conceived through fertility treatment.

Although the participants may not be representative of all subfertile clients, the findings of our qualitative study highlight that women who have become pregnant through fertility treatment and their partners say they want a normal pregnancy but at the same time they prefer to receive care that differs from the norm in midwifery practice. While they all indicated that they hoped for a “normal” pregnancy, they also needed help from the primary care midwife in understanding the likely course of their pregnancy, more psychosocial support and understanding of the previous fertility treatment history, and more consultations and frequent ultrasound scans to confirm pregnancy.

Comparison with existing literature

In the Netherlands, after the fertility specialist has confirmed the pregnancy, the women in question should be routinely referred to the primary care midwife. Sometimes a woman who conceived through fertility treatment and with a physiologic pregnancy wants to receive the obstetrical care of the gynecologist in hospital, and in exceptional cases this is allowed. We did not include these women [24] in our study. Our participants who eventually received care from the gynecologist developed an indication of increased obstetric risk in the course of their pregnancy.

The consultation schedule [11] proposed by the Royal Dutch Organization of Midwives (KNOV) may be inadequate

Table 7. Psychosocial support.

<b>Abraham p. 4</b>	<i>“[I] had a reduced sperm quality, but SHE had to undergo all treatments. We stick to the agreement, . . . yeah, uh, as far as possible . . . to do it together.”</i>
<b>Didi p. 10:</b>	<i>“ . . . Yes, I think you have to listen very carefully to your patient’s needs.”</i>
<b>Fay p. 6:</b>	<i>“ . . . We have to learn to trust.”</i>
<b>Fay p. 9:</b>	<i>“ . . . You have to make sure as a midwife that people get the impression that you’re approachable.”</i>
<b>Ivonne p.14:</b>	<i>“ . . . Well yes, there’s still a lot of stress left over from everything that happened in the past, and I just need to talk about it for a while. About the fact that the pregnancy is quite a stressful period, and that you need to know that your feelings are understood. In fact, I really think that showing understanding is the most important thing.”</i>

Table 8. Care needs in general.

<b>Erica p. 7:</b>	<i>“ . . . Well, I can’t understand . . . how people can just wait for six weeks without feeling anything at all – apart from the morning sickness, that is. Not feeling any movement or hearing that little heartbeat or anything. I would have needed that reassurance – and there’s nothing to stop you from getting it.”</i>
<b>Gwen p. 11:</b>	<i>“ . . . Well, I must say that I personally appreciated the fact that my midwife let me come more often if I wanted to, or she would ask, well, when would you like to come next? Yes, that was really great, there I was, I could come for a check-up every four weeks at that stage and then she said, when do you want to come? Well, I didn’t want to overdo it so I said in 3 weeks, or 2 weeks maybe. Yes, I really appreciated it as such, the chance to have another little check-up again”.</i>

for women who have undergone fertility treatment. In our study, women who had undergone fertility treatment indicated a greater need of reassurance concerning the viability of their pregnancy during the first half of pregnancy, and the interval of four to six weeks between visits as recommended by the KNOV [11] may be inadequate for this group [20].

Redshaw et al. [16] investigated the experiences of women who had undergone treatment for infertility and had given birth subsequently, but focused solely on the experience of the fertility treatment itself and not on the care given afterward in pregnancy. Furthermore, they analyzed open-ended questions instead of using in-depth interviews. Nevertheless, the results of their study have parallels to our study. Clients with past fertility problems wanted their distress to be recognized, to feel cared for and to have confidence in health professionals in situations where outcomes are uncertain. A qualitative Dutch study [25] indicated that all healthy pregnant clients want proactive, psychosocial support from their primary care midwife. Considering that “time to achieve pregnancy” or “means of conception” was not part of in- or exclusion, a possible explanation is that the participants of the study of Seefat-van Teeffelen et al. [25] also included subfertile women. This study by Seefat-van Teeffelen et al. [25] focused primarily on psychosocial support, while our study shows that pregnant women who have undergone fertility treatment also want more care in the form of extra consultations to confirm the viability of their pregnancy. However, more consultations may be a wish of many pregnant women, including the women who conceived naturally.

In the Netherlands, there are new initiatives to come to a more integrated maternity care system. In Haarlem, all pregnant women in this region have their first consultation with a primary care midwife and have at least one prenatal consultation with a gynecologist in secondary care (<http://www.rondomzwanger.nl>). The care pathway for a woman pregnant after fertility treatment is the same as for “normal” pregnant woman, except that the subfertile woman can ask for more consultations, including frequent fetal heartbeat.

On the one hand, the transition to motherhood may be regarded as a major life event [26] in general for all new mothers; on the other hand, research shows that a pregnancy after a subfertile period is psychologically and medically not always a normal pregnancy. High levels of anxiety and depression were seen in women undergoing fertility treatment [13,27,28]. Women who conceived through IVF were more anxious than those who conceived naturally [13,20,29,30]. Although some studies did not find a relationship between reproductive technologies and the risk of birth defects or other complications [31,32], other studies showed that births following fertility treatment are associated with an increased risk of preterm birth and low birth weight or other complications during pregnancy and birth [12,33–39], making our participants’ concerns relevant. One may even argue that the Dutch maternity care system should regard these pregnancies as higher risk and the Obstetrics Indications List may need to be adjusted on this point.

A lack of knowledge regarding subfertility may lead Dutch midwives to pay insufficient attention to women who are pregnant following fertility treatment, since this topic does not feature much in the curriculum of Dutch midwifery academies. Other research indicates that there is a need for midwives [20,29] and other healthcare professionals [40] to be more familiar with issues surrounding fertility problems in order to offer better care. Allan and Finnerty [17,18] urged that further work is needed to investigate the gap between the existing literature and the midwifery care provided to clients with a history of subfertility.

Strengths and limitations

We believe that the constructivist/interpretative paradigm as frame of reference is appropriate to our research question. We relied upon the participants’ “view of the situation studied” [21] and through the conversation between researchers and participants, we were able to “negotiate truth through dialogue” and “construct reality together”. We recognized the impact on the research of our own background (midwives,



psychologists, expert by experience). We attempted to promote heterogeneity so as to achieve a mix of subfertile clients with different causes of their subfertility, the fertility treatment they received, the time to conceive and the part of the Netherlands they resided in.

One of the other strengths of our study was the quality of the procedures. Working with a topic list made sure that every aspect of this research was mentioned in the interviews. Several interviews with couples and individual interviews were conducted (data triangulation), and the coding and analysis of the data by several researchers with different backgrounds and perspectives and discussing the interpretations (investigator triangulation) enhanced the reliability of these findings [22]. Validity was also enhanced using a member-checking approach: the researchers returned the transcript to all participants to verify the data and the interpretation of the findings reflected the women's experience with midwifery care. Transferability was established through "thick description" [22] in which detailed description of data with a rich mix of participants' quotations were considered. To round off the study, we used the consolidated criteria for reporting qualitative research (COREQ) checklist to ensure that the investigation complied with the criteria for qualitative research [23].

There are important limitations that must be considered in the interpretation of the results. The interviews did not take place under standardized circumstances and were not all undertaken by the same interviewer, but the results were comparable. The participants had undergone a wide range of fertility treatments, with no acknowledgment that more invasive forms of treatment may be correlated with more anxiety about health during pregnancy. Nevertheless, our results contribute to the understanding of midwifery care needs of subfertile client.

During the interviews new topics emerged about the postpartum period, such as breastfeeding and information about contraception. Since saturation was not reached on the postpartum care period, further research on the period is needed, with participants having received their entire care from their primary care midwife, including childbirth and postpartum period.

## Implications

The paradoxical needs can make it difficult for the primary care to determine precisely what level of care subfertile clients require. On the one hand, they want to experience a normal pregnancy – and indeed they do, since they have no specific medical indication for specialist care. On the other hand, they do have the feeling that their pregnancy is special, and they want to be treated accordingly. The primary care midwife thus needs to find a way to reconcile these two aspects: does she want to offer these women extra care, while not all mothers-to-be require such special treatment? It may be necessary to draw up specific standards or guidelines of care for this subgroup of pregnant women.

Primary care midwives and other maternity care providers appear to lack knowledge regarding subfertility and fertility treatment as it concerns the provision of sensitive support for pregnant women and their partners. Clients find it difficult to express their feelings of uncertainty about the pregnancy, and

are often not given enough opportunity to voice their concerns during routine check-ups. Maternity care providers may currently play too passive a role in this respect; it would be preferable for them to enquire more actively about the feelings and emotions that these women and their partners experience and help the couple to adjust to their new identities as parents, given their previous histories of subfertility. More emphasis could thus be placed on topics relating to subfertility and fertility treatment within the midwifery pre-registration education. Extra emphasis can be placed on history taking and acknowledging the couples' journeys through conception, pregnancy and birth. Tailored support is essential and may focus on assisting clients to vocalize their feelings about adjusting to parenthood following successful assisted conception.

At present, there is little sharing of information with other disciplines in health care. In particular, the midwife does not see the case notes of the fertility specialist, so she has to document the client's entire past history from scratch. Pregnant women have to play a communicative role in transferring and correcting information between primary care midwives and the fertility specialist. Better information sharing could provide the midwife with a clearer picture of the woman's past history and make it much easier to broach this topic during consultations.

This study raises a number of questions for further investigation. The present study was focused on care during pregnancy, but the issue of care during and after childbirth (also tasks for a primary care midwife) was occasionally mentioned in the transcripts. Future research could focus on the psychosocial and other aspects of care in relation to this issue. A larger-scale quantitative study of the midwifery care needs of subfertile clients would allow the conclusions from the present investigation to be substantiated and give a more concrete picture of the care needs of this group of clients. Use of structured questionnaires can provide a firmer basis for an improved consultation schedule, and may also help to show whether clients with different or no fertility problems, fertility treatments required or the length of the subfertility in the past, or with dissimilar gravity/parity have different midwifery care needs.

## Conclusions

The findings of our qualitative study illuminate that women who have become pregnant through fertility treatment and their partners can have midwifery care needs that can seem paradoxical. While women want their pregnancy to *feel* normal, they certainly appear to have greater care-needs and a need for explicit acknowledgement of the preceding fertility trajectory at relevant points during care. It is important for maternity care providers to understand the paradoxical nature of subfertile clients' needs. Thus, it makes sense to acknowledge these care-needs by providing more space during consultations to reflect on the preceding fertility treatment and to offer these women shorter intervals between consultations – while making the woman feel that her pregnancy is normal.

Current knowledge on this subject

- Pregnancy, childbirth and the postpartum period after fertility treatment are considered "normal" in the Netherlands, with

no indication of an increased obstetric risk, and can therefore be monitored by a primary care midwife.

- Research shows that a pregnancy after a subfertile period is psychologically and medically not always a “normal” pregnancy.
- There is little evidence on experiences of couples and women who finally get pregnant after fertility treatment and a lack of training for midwives on this subject.

What this study adds

- Women who have become pregnant through fertility treatment and their partners say that they want a normal pregnancy, but require care that differs from the norm in midwifery practice.
- Our study maps the midwifery care needs of subfertile clients who finally did conceive after extended periods of subfertility and fertility treatments and can help maternity care providers to optimally meet the care needs of subfertile clients and empower them during their transition from subfertility to parenthood.
- Our findings can close the gap between research evidence, training of midwives and the midwifery care provided to women and their partners with past fertility problems.

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